

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Reissue Application of: Davis et al.

Reissue Serial No.: 09/315,796

Filed: May 20, 1999

For: Combined Lithographic/Flexographic Printing Apparatus and Process

Examiner: Funk, Stephen

Art Group: 2854

**DECLARATION OF GEORG HARTUNG, ULRICH JUNG,
AND JURGEN SCHNEIDER**

We, Georg Hartung, Ulrich Jung, and Jurgen Schneider, declare the following:

We are presently employed by MAN-Roland Druckmaschinen A.G. ("MAN"), a corporation organized under the laws of the Federal Republic of Germany.

We are the co-inventors of the inventions described in German Gebrauchsmuster G 93 05 552.8 (U1), EP 620,115 and U.S. Patent No. 5,638,752.

MAN is the owner of all rights, title and interest in German Gebrauchsmuster G 93 05 552.8 (U1), EP 620,115 and U.S. Patent No. 5,638,752.

We understand that a reissue patent application (the "Reissue Application") is pending to U.S. Patent No. 5,630,363 (Exhibit A). We have read and understand the subject matter of this patent.

5. We further understand a second non-final, substantive office action was transmitted to reissue applicants on April 27, 2001 (Exhibit B).
6. We understand from this office action that there are presently 151 pending claims (Exhibit C) in the Reissue Application, of which claims 1-5, 12-14 and 39-41 are allowed and claims 58-59 and 82-84 are allowable if non-prior art formalities are cured, but claims 6-11, 15-38 and 42-151 stand rejected, with:
 - (a) at least claims 6, 8-11, 15-38, 42-57, 60-74, 76-77, 79-81 and 86-151 being rejected over various alleged prior art combinations with Gebrauchsmuster G 93

05 552.8 (U1) ("MAN Roland" per the Examiner's notation)(Exhibit D), as a first, or lead reference; and

(b) at least claims 6, 9-11, 15-23, 25-33, 37-38, 44-57, 60-66, 68-76, 80-81, 85-87, 88-98, 100-134 and 138-148 being rejected over U.S. Patent No. 5,638,752 to Hartung, et al. ("Hartung et al. ('752)" per the Examiner's notation)(Exhibit E) or its European equivalent, EP 620,115 ("Hartung et al. ('115)" per the Examiner's notation) (Exhibit F), as a first or lead reference.

7. We have read and understand the secondary references that are cited in the office action.

8. We had at the time the invention of U.S. Patent No. 5,630,363 was made, and presently have, ordinary skill in the art pertaining to the subject matter of the invention.

9. We believe that the disclosure of U.S. Patent No. 5,630,363 reasonably conveys to one skilled in the relevant art that the inventors had possession of the claimed invention as it relates to perfector printing. Furthermore, we believe that disclosure of a continuous in-line process necessarily implies perfector printing.

10. With respect to Claims 6-8, 38, and 49-51, it would not have been obvious to one of ordinary skill in the art to utilize the apparatus and method of MAN Roland to print aqueous based metallic inks in view of Pantone and Offsetpraxis to achieve a superior metallic image. With respect to the dependent claims it would not have been obvious to one of ordinary skill in the art through routine experimentation to use either uniform or non-uniform sized metal particles to achieve the desired metallic effect. Furthermore, nothing in the cited references teaches, suggests or motivates one of ordinary skill in the art to combine the references in the manner described by the Examiner.

With respect to Claims 9 and 52, it would not have been obvious to one of ordinary skill in the art to provide the apparatus and method of MAN Roland, as modified by Pantone and Offsetpraxis, with a plate cylinder mounted flexographic plate and blanket cylinder in view of Bird so as to selectively utilize the unit as a flexographic or lithographic unit. Furthermore, nothing in the cited references teaches, suggests or motivates one of ordinary skill in the art to combine the references in the manner described by the Examiner.

12. With respect to Claims 42 and 43, it would not have been obvious to one of ordinary skill in the art to provide the apparatus and method of MAN Roland, as modified by Pantone and Offsetpraxis, with perfector printing in view of Schone et al. so as to print both sides of the substrate in one pass. Furthermore, nothing in the cited references teaches, suggests or motivates one of ordinary skill in the art to combine the references in the manner described by the Examiner.

13. With respect to Claims 10, 29, and 31-33, it would not have been obvious to one of ordinary skill in the art to provide the apparatus and process disclosed by MAN Roland with the capability of printing a flexographic image in view of Satterwhite to achieve the benefits of printing with a flexographic unit. Furthermore, nothing in the cited references

teaches, suggests or motivates one of ordinary skill in the art to combine the references in the manner described by the Examiner.

14. With respect to Claims 11, 30 and 60-66, it would not have been obvious to one of ordinary skill in the art to provide the apparatus and method of MAN Roland, as modified by Satterwhite, with a plate cylinder mounted flexographic plate and blanket cylinder in view of Bird so as to selectively utilize the unit as a flexographic or lithographic unit. Additionally, it would not have been obvious to one of ordinary skill in the art to provide the apparatus and method of MAN Roland, as modified by Satterwhite, with interstation dryers in view of Bird so as to dry images before subsequent printing and/or coating. Furthermore, nothing in the cited references teaches, suggests or motivates one of ordinary skill in the art to combine the references in the manner described by the Examiner.

15. With respect to Claim 67, it would not have been obvious to one of ordinary skill in the art to provide the method of MAN Roland, as modified by Satterwhite and Bird, with the step of printing an encapsulated essence in view of Schumacher et al. to apply a sufficiently heavy coating. Furthermore, nothing in the cited references teaches, suggests or motivates one of ordinary skill in the art to combine the references in the manner described by the Examiner.

16. With respect to Claims 68-71, it would not have been obvious to one of ordinary skill in the art to utilize the apparatus and method of MAN Roland, as modified by Satterwhite and Bird, to print aqueous based metallic inks in view of Pantone and Offsetpraxis to achieve a superior metallic image. Furthermore, nothing in the cited references teaches, suggests or motivates one of ordinary skill in the art to combine the references in the manner described by the Examiner.

17. With respect to Claims 34-36, it would not have been obvious to one of ordinary skill in the art to provide the method of MAN Roland, as modified by Satterwhite, with the step of printing an encapsulated essence in view of Schumacher et al. to apply a sufficiently heavy coating. Furthermore, nothing in the cited references teaches, suggests or motivates one of ordinary skill in the art to combine the references in the manner described by the Examiner.

18. With respect to Claims 42, 43, and 53, it would not have been obvious to one of ordinary skill in the art to provide the apparatus and method of MAN Roland, as modified by Satterwhite, with perfector printing in view of Schone et al. so as to print both sides of the substrate in one pass. Furthermore, nothing in the cited references teaches, suggests or motivates one of ordinary skill in the art to combine the references in the manner described by the Examiner.

19. With respect to Claim 54, it would not have been obvious to one of ordinary skill in the art to provide the apparatus and method of MAN Roland, as modified by Satterwhite and Schone et al., with a plate cylinder mounted flexographic plate and blanket cylinder in view of Bird to so as to selectively utilize the unit as a flexographic or lithographic unit. Furthermore, nothing in the cited references teaches, suggests or motivates one of

ordinary skill in the art to combine the references in the manner described by the Examiner.

20. With respect to Claims 15-23, 37, 44-48, 55, 88-93, 97-99, 103-108, 114-118, 124, 126-130, 138, and 140-144, it would not have been obvious to one of ordinary skill in the art to provide the apparatus and method of MAN Roland with a plate cylinder mounted flexographic plate and blanket cylinder in view of Bird to so as to selectively utilize the unit as a flexographic or lithographic unit. Furthermore, nothing in the cited references teaches, suggests or motivates one of ordinary skill in the art to combine the references in the manner described by the Examiner.

21. With respect to Claim 24, it would not have been obvious to one of ordinary skill in the art to provide the method of MAN Roland, as modified by Bird, with the step of printing an encapsulated essence in view of Schumacher et al. to apply a sufficiently heavy coating. Furthermore, nothing in the cited references teaches, suggests or motivates one of ordinary skill in the art to combine the references in the manner described by the Examiner.

22. With respect to Claims 25-28, 131-134, and 145-148, it would not have been obvious to one of ordinary skill in the art to utilize the apparatus and method of MAN Roland, as modified by Bird, to print aqueous based metallic inks if view of Pantone and Offsetpraxis to achieve a superior metallic image. Furthermore, nothing in the cited references teaches, suggests or motivates one of ordinary skill in the art to combine the references in the manner described by the Examiner.

23. With respect to Claims 56, 57, 135, 136, 149, and 150, it would not have been obvious to one of ordinary skill in the art to provide the apparatus and method of MAN Roland, as modified by Bird, with the step of printing with an opaque white ink of Roulleau so as to provide sufficient contrast for subsequently printed colors. Furthermore, nothing in the cited references teaches, suggests or motivates one of ordinary skill in the art to combine the references in the manner described by the Examiner.

24. With respect to Claims 137 and 151, it would not have been obvious to one of ordinary skill in the art to provide the method of MAN Roland, as modified by Bird and Roulleau, with the step of printing an encapsulated essence in view of Schumacher et al. to apply a sufficiently heavy coating. Furthermore, nothing in the cited references teaches, suggests or motivates one of ordinary skill in the art to combine the references in the manner described by the Examiner.

25. With respect to Claims 42, 43, 80, 81, 94-96, 100-102, 109-113, 119-123, 125, 127-130, 139, and 141-144, it would not have been obvious to one of ordinary skill in the art to provide the apparatus and method of MAN Roland, as modified by Bird, with perfecto printing in view of Schone et al. so as to print both sides of the substrate in one pass. Furthermore, nothing in the cited references teaches, suggests or motivates one of ordinary skill in the art to combine the references in the manner described by the Examiner.

26. With respect to Claims 131-134 and 145-148, it would not have been obvious to one of ordinary skill in the art to utilize the apparatus and method of MAN Roland, as modified by Bird and Schone, et al., to print aqueous based metallic inks if view of Pantone and Offsetpraxis to achieve a superior metallic image. Furthermore, nothing in the cited references teaches, suggests or motivates one of ordinary skill in the art to combine the references in the manner described by the Examiner.
27. With respect to Claims 135, 136, 149, and 150, it would not have been obvious to one of ordinary skill in the art to provide the apparatus and method of MAN Roland, as modified by Bird and Schone et al., with the step of printing with an opaque white ink of Roulleau so as to provide sufficient contrast for subsequently printed colors. Furthermore, nothing in the cited references teaches, suggests or motivates one of ordinary skill in the art to combine the references in the manner described by the Examiner.
28. With respect to Claims 137 and 151, it would not have been obvious to one of ordinary skill in the art to provide the method of MAN Roland, as modified by Bird, Schone, et al., and Roulleau, with the step of printing an encapsulated essence in view of Schumacher et al. to apply a sufficiently heavy coating. Furthermore, nothing in the cited references teaches, suggests or motivates one of ordinary skill in the art to combine the references in the manner described by the Examiner.
29. With respect to Claims 72, 74, 76, 86, and 87, it would not have been obvious to one of ordinary skill in the art to provide the apparatus and method of MAN Roland with perfector printing in view of Schone et al. so as to print both sides of the substrate in one pass. Furthermore, nothing in the cited references teaches, suggests or motivates one of ordinary skill in the art to combine the references in the manner described by the Examiner.
30. With respect to Claim 73, it would not have been obvious to one of ordinary skill in the art to provide the apparatus and method of MAN Roland, as modified by Schone et al., with a plate cylinder mounted flexographic plate and blanket cylinder in view of Bird so as to selectively utilize the unit as a flexographic or lithographic unit. Furthermore, nothing in the cited references teaches, suggests or motivates one of ordinary skill in the art to combine the references in the manner described by the Examiner.
31. With respect to Claims 77 and 79, it would not have been obvious to one of ordinary skill in the art to provide the method of MAN Roland, as modified by Schone, et al., with the step of printing an encapsulated essence in view of Schumacher et al. to apply a sufficiently heavy coating. Furthermore, nothing in the cited references teaches, suggests or motivates one of ordinary skill in the art to combine the references in the manner described by the Examiner.
32. With respect to Claims 6, 10, 29, 31, 38, 44-46, and 49, Hartung et al. (U.S. 5,638,752) does not teach the apparatus and method as recited.
33. With respect to Claims 6, 10, 29, 31, 38, 44-46, and 49, Hartung et al. (EP 620,115) does not teach the apparatus and method as recited.

34. With respect to Claims 7, 8, 32, 33, 47, 48, 50 and 51, each of the recited sizes of particles, ink types, or substrate types would not have been obvious to one of ordinary skill in the art through routine experimentation and were not conventional in the art. Furthermore, nothing in the cited references teaches, suggests or motivates one of ordinary skill in the art to combine the references in the manner described by the Examiner.

35. With respect to Claims 9, 11, 15-23, 25-28, 30, 37, 52, 55-57, 60-66, 68-71, 88-90, 91-93, 97-99, 103-108, 114-118, 124, 126-134, 138, and 140-148, it would not have been obvious to one of ordinary skill in the art to provide the apparatus and method of Hartung et al. ('752) or ('115) with a plate cylinder mounted flexographic plate and blanket cylinder in view of Bird so as to selectively utilize the unit as a flexographic or lithographic unit. Furthermore, nothing in the cited references teaches, suggests or motivates one of ordinary skill in the art to combine the references in the manner described by the Examiner.

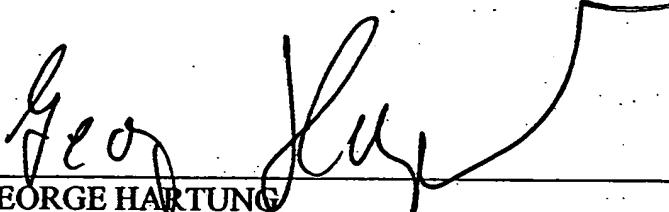
36. With respect to Claims 53, 72, 74-76, 81, and 85-87, it would not have been obvious to one of ordinary skill in the art to provide the apparatus and method of Hartung et al. ('752) or ('115) with perfector printing in view of Schone et al. so as to print both sides of the substrate in one pass. Furthermore, nothing in the cited references teaches, suggests or motivates one of ordinary skill in the art to combine the references in the manner described by the Examiner.

37. With respect to Claims 54, 73, 80, 94-96, 100-102, 109-113, 119-123, 125, 127-134, 139 and 142-148, it would not have been obvious to one of ordinary skill in the art to provide the apparatus and method of Hartung et al. ('752) or ('115) with a plate cylinder mounted flexographic plate and blanket cylinder in view of Bird so as to selectively utilize the unit as a flexographic or lithographic unit and with perfector printing in view of Schone et al. so as to print both sides of the substrate in one pass. Furthermore, nothing in the cited references teaches, suggests or motivates one of ordinary skill in the art to combine the references in the manner described by the Examiner.

38. With respect to Claims 6, 10, 29, 31, 38, 44-46, and 49, MAN Roland does not teach the apparatus and method as recited.

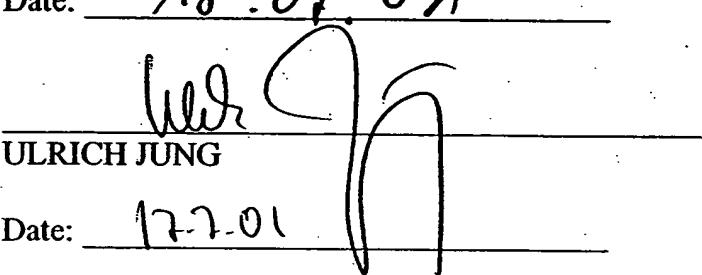
The foregoing statements are made under oath pursuant to the provisions of 18 U.S.C. §1001, and the undersigned acknowledges that any reissue patent from Serial No. 09/315,796 may be deemed invalid in whole or in part or deemed unenforceable in the event of a willful false statement.

SIGNED:



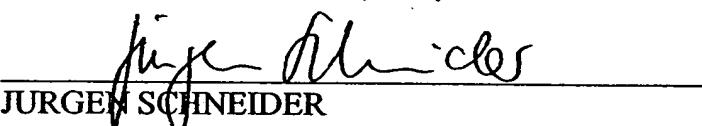
GEORGE HARTUNG

Date: 18.07.01



ULRICH JUNG

Date: 17.7.01



JURGEN SCHNEIDER

Date: 17.7.01